

REMARKS:

In the foregoing amendments, claims 1 and 2 were amended to define that the locking means of the presently claimed invention locks the bending mechanism in an adjusted position so as to hold a curvature of the wavelength selection element constant against the mechanical shock applied to the optical resonator, and making adjustment of the curvature of the wavelength selection element impossible after locking. Claims 3 and 4 were added to the application and further define that the locking means includes a locking screw. Claims 1-4 are in the application for consideration by the examiner.

Claims 1 and 2 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. patent No. 6,212,217 of Erie *et al.* (Erie). Applicant respectfully submits that the teachings of Erie do not disclose or suggest the invention as set forth in claims 1-4 within the meaning of 35 U.S.C. § 102 or 35 U.S.C. § 103.

In the bending mechanism of the presently claimed invention, such as shown in Fig. 1, a curvature of the grating 1 is adjusted by the movement of the pushing member 2 that is moved by the adjusting bolt. Normally, the curvature of the grating 1 is held constant in the situation where the adjustment is not performed by the adjusting bolt 5. In such a situation, if the bending mechanism receives a mechanical shock from an outside source, the adjusting bolt 5 or the pushing member 2 may be jarred out of their adjusted positions, which changes the curvature of the grating.

In the presently claimed invention, the pushing member 2 can be locked by locking screws 8, 11. The adjusting bolt 5 can be locked by a locknut, etc. By use of the presently claimed locking means, any undesired movement of the adjustment of the curvature is impossible, when it is locked by the locking means. In addition, any movement of the pushing member 2 and the adjusting bolts is also prevented by the mechanical shocks, when the locking means is locked.

The teachings of Erie allegedly propose that a grating curvature stepper motor holds the position of the grating constant, as proffered in the Office action. However, these teachings do not disclose or suggest that this stepper motor locks the position of the grating in such a manner, so that not only the adjustment of the curvature is made impossible, but also the movement of the pushing member and the adjusting bolts is prevented by mechanical shocks, which functions are obtained in the structure set forth in applicant's claims. For example, if the bending mechanism 20A in the structure proposed by Erie receives a mechanical shock, the position of the bending mechanism 20A itself can be shifted from an adjusted position, resulting in a change in the curvature of the grating. The presently claimed invention prevents this type of shifting and, therefore, provides a vastly superior structure to that proposed by Erie.

Applicant's claim 1 specifically requires that the locking means and the bending mechanism are separate structures. Applicant's claim 2 defines separate locking means and adjustment means. The teachings of Erie simply

do not contemplate or suggest a separate locking means as required in the present claims. It is noted that the Official action alluded to a stepper motor as suggesting the presently claimed locking means. Firstly, it is respectfully noted that a stepper motor cannot be a locking means, because there needs to be some play or tolerance within the structure of the stepper motor, which tolerance prevents the stepper motor from being a locking means.

More importantly, the stepper motor proposed in Erie, in reality, is not a separate structure from the bending mechanism. Namely, the stepper motor in Erie is a part of the bending mechanism because it is necessary to use the stepper motor in order for the bending mechanism to operate. Therefore, the teachings of Erie cannot suggest the separate locking means of applicant's claims.

For example, applicant's claim 1 defines a bending mechanism that bends a reflex type wavelength selection element constituting a part of an optical resonator according to a curvature of the wave front of an incident laser beam. Applicant's claim 2 defines an adjustment means for varying a position of a grating that modifies the curvature of a wave front of an incident laser beam to an adjusted position. The bending mechanism 20A proposed by Erie cannot perform the function for the bending mechanism and adjustment means as set forth in applicant's claims without the stepper motor. Thus, the stepper motor proposed in Erie is a part of the bending mechanism therein, when compared to the presently claimed invention. Therefore, the teachings of

Erie do not propose any separate structure for a locking means, as required in the present claims. For this reason, applicant respectfully submits that it is impossible for the teachings of Erie to contemplate or suggest the invention as set forth in the present claims.

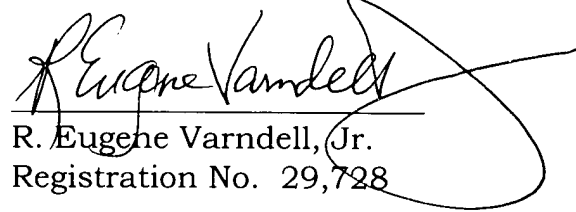
In addition, the applicant is unable to find any discussion in the teachings of Erie concerning the use of a locking screw within the locking means, as required in present claims 3 and 4. Therefore, applicant respectfully submits that claims 3 and 4 are distinguishable from the teachings of Erie, and thus, patentable.

In view of the foregoing amendments and remarks, applicant respectfully submits that claims 1-4 are patentably distinguishable from the teachings of Erie. Therefore, applicant respectfully requests that the examiner reconsider and withdraw this rejection. For these reasons, applicant respectfully requests a formal allowance of claims 1-4.

The foregoing is believed to be a complete and proper response to the Official action mailed January 16, 2003. While it is believed that all the claims in this application are in condition for allowance, should the examiner have any comments or questions, it is respectfully requested that the undersigned be telephoned at the below listed number to resolve any outstanding issues.

In the event this paper is not timely filed, applicant hereby petitions for an appropriate extension of time. The fee therefor, as well as any other fees which may become due, may be charged to our deposit account No. 22-0256.

Respectfully submitted,  
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